

Remarks

A. Overview

The present application includes claims 1-15 and 21-27. With this Amendment, Applicants have amended claims 7, 12, and 21 and have added new claims 25-27.

Applicants acknowledge with appreciation the Examiner's allowance of claims 11 and 13-15.

B. Claim Rejections under § 112

Claims 7 and 12 were rejected under 35 U.S.C § 112, second paragraph, as being indefinite.

With reference to claim 7, the Examiner asserted that the limitation "the plurality of casters each include a set screw to orient the caster" is unclear. Applicants have amended claim 7 to positively recite a plurality of set screws configured to orient the plurality of casters, wherein the caster mounting tubes are each formed to include an opening configured to receive one of the set screws.

Referring to claim 12, the Examiner asserted that the limitation "the caster includes a set screw to orient the caster" and the limitation "an opening in the mounting tube to receive the set screw of the caster" are unclear. In response, applicants have amended claim 12 to recite the steps of providing a set screw and forming an opening in the mounting tube to receive the set screw and orient the caster.

The aforementioned amendments to claims 7 and 12 are concerned only with matters of form and do not affect the intended scope of protection. It is respectfully submitted that all of the claims fulfill the requirements of 35 U.S.C. § 112, and it is requested that the Examiner withdraw the rejections of claims 7 and 12.

C. Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-4, 8, 10, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,269,388 to Reichow et al. in view of U.S. Patent No. 5,330,064 to Hall. The rejected claims include independent claims 1 and 21 from which the remaining rejected claims depend.

The Reichow et al. patent, neither alone nor in combination with the Hall patent, discloses, teaches, or suggests the patient support apparatus as recited in claim 1 comprising, "... a plurality of caster mounting tubes, each mounting tube including a plurality of external

side walls surrounding an opening ... the interior surface [of the external side walls] being configured to receive in abutting relationship the sleeve of a caster” Neither the Reichow et al. patent nor the Hall patent disclose, teach or suggest a caster mounting tube including an interior surface configured to receive in abutting relationship the sleeve of a caster.

The Patent and Trademark Office can satisfy its burden of establishing obviousness “only by showing some *objective* teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teachings of the references.” In re Fine, 1837 F.2d 1071, 1073 (Fed. Cir. 1988) (emphasis added) (citations omitted). The Federal Circuit in In re Fine further stated that a “bald assertion” that substituting an element in a prior art reference would have been within the ordinary skill in the art is insufficient to support a finding of obviousness. Id. at 1074.

The Examiner has failed to satisfy the Patent and Trademark Office burden of establishing obviousness. More particularly, the Examiner fails to show any teaching that would suggest modifying Reichow et al. in the manner suggested. The prior art simply does not teach or suggest all of the limitations recited in claim 1.

The Reichow et al. patent simply discloses a weighing bed 10 including a lower bed frame 16 having two elongated longitudinal members 42 and 44. The longitudinal members 42 and 44 terminate in caster assemblies 45-45, which permit movement of the bed 10. Conventional casters on a bed is admitted prior art disclosed in the Background and Summary of the Invention section of the present application. No details of the caster assemblies 45-45 are provided in the Reichow et al. patent.

The Examiner, referring to Figs. 1 and 2 of the Hall patent, asserted that reference numeral 54 is a sleeve and that reference numeral 44 is a rectangular caster mounting tube.¹ Referring to the specification of the Hall patent, reference numeral 44 is an exterior support member and reference numeral 54 is an extension.² The Examiner fails to point to the disclosure of the Hall patent wherein the relationship between exterior support member 44 and extension 54 teach or suggest the limitations recited in claim 1, more particularly, that of “... the interior surface [of the external side walls of the caster mounting tube] being configured to receive in abutting relationship the sleeve of a caster”

Referring to Figs. 2 and 3 of the Hall patent, it is clear that upright 40 is positioned between extension 54 and exterior support member 44. Referring to the text of the Hall patent, “upright 40 is inserted into exterior support member 44 from above, as viewed in FIG.

¹ Office Action, numbered paragraph 6, at page 4.

² Hall patent, col. 3, lines 56-62.

2. Then, extension 54 is inserted into the interior of upright 40 from below.”³ Applicants respectfully submit that an interior surface of exterior support member 44 does not receive in abutting relationship extension 54.

There is simply no disclosure in either the Reichow et al. or Hall patents of the abutting relationship as clearly recited in claim 1. Given that none of the cited references disclose this relationship, applicants fail to see how a combination of these references could possibly motivate one of ordinary skill in the art to arrive at the applicants’ invention. For at least these reasons, applicants respectfully submit that the patient support apparatus as recited in independent claim 1 is patentable over the Reichow et al. and Hall patents. Accordingly, applicants submit that independent claim 1 is in condition for allowance.

Claims 2-4, 8, and 10 depend from claim 1 and are patentable over the Reichow et al. and Hall patents at least for the reasons given above in connection with claim 1, and for the further dependent limitations recited therein. Accordingly, applicants submit that claims 2-4, 8, and 10 are in condition for allowance.

The Reichow et al. patent, neither alone nor in combination with Hall, discloses, teaches or suggests the patient support apparatus recited in amended claim 21 comprising, “... a plurality of caster mounting tubes, each mounting tube having ... a plurality of external side walls including a generally planar first external side wall abutting the base frame, the mounting tube being connected to the base frame by welds located adjacent the first external side wall, wherein the first external side wall ... is formed to include a hole, the base frame is formed to include a hole, the hole in the base frame being aligned with the hole in the first external side wall, and both holes are configured to receive a movable shaft and are positioned in spaced relation to the welds located adjacent the first external side wall.”

The Examiner, referring to Figs. 1 and 2 of the Hall patent, asserted that this reference discloses “a plurality of rectangular caster mounting tubes 44, each mounting tube including a plurality of external side walls surrounding an opening, each external side walls (sic) having an interior surface facing inwardly toward the opening, the interior surface being configured to receive in abutting relationship with the sleeve of the caster, and the mounting tube being connected to base frame by welds”⁴ As acknowledged by the Examiner, Reichow et al. “fails to show the base frame is formed to include a hole aligned to a hole in the external side wall abutting the base frame....” The Examiner then took “Official Notice that it is old and well known to use rivets and welding together ...” and concluded that

³ Hall patent, col. 4, lines 58-62.

⁴ Office Action, numbered paragraph 6, at page 4.

installing a rivet requires aligned holes in the side wall of the mounting tube and the base frame.⁵ As such, the Examiner concluded that Hall discloses the limitation directed to the holes in claim 21.

Neither Reichow et al. nor Hall teach or suggest "... the mounting tube being connected to the base frame by welds located adjacent the first external side wall, wherein the first external side wall abutting the base frame is formed to include a hole, the base frame is formed to include a hole, the hole in base frame being aligned with the hole in the first external side wall" While in Col. 4, lines 55-57 of Hall, it is disclosed that rivets may be used to attach exterior support member 44 to vertical face 38 of frame 24, this is disclosed as an alternative to welding or spot welding. As such, Hall suggests that rivets be used to replace the spot welds 239 as illustrated in Fig. 5. There is no suggestion that the welds and rivets be used in combination.

As noted above, in support of his position the Examiner took "Official Notice that it is old and well known to use rivets and welding together to better align and secure the two parts of a device." The Examiner then concluded that "[i]t would have been obvious ... to have used rivets and welds to secure the mounting tube and base frame into the apparatus of Reichow et al."

It is clear that "deficiencies of the cited reference cannot be remedied by ... general conclusions about what is 'basic knowledge' or 'common sense'." In re Zurko, 258 F.3d 1379, 1385 (Fed. Cir. 2001). As stated by the Federal Circuit, "[t]his factual question of motivation is material to patentability, and could not be resolved on subjective beliefs and unknown authority." In re Lee, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983)). In the present case, the Examiner's conclusory statement that "it is old and well known to use rivets and welding together" does not satisfy the Patent and Trademark Office burden as clearly defined by the Federal Circuit. The Examiner has simply failed to provide any objective teaching which would motivate one of ordinary skill in the art to arrive at the invention recited in amended claim 21.

Even assuming, *arguendo*, that the prior art suggested the combination of rivets and welding, the holes as recited in amended claim 21 do not serve a fastening function. Instead, the holes as recited in claim 21 are configured to receive a movable shaft which is operably coupled to a brake mechanism of a caster. As such, claim 21 has been amended to clearly

⁵ Office Action, numbered paragraph 6, at page 5.

recite that the holes are configured to receive a movable shaft and are positioned in spaced relation to the welds located adjacent the first external side wall.

For at least the above reasons, it is respectfully submitted that amended claim 21 is in condition for allowance.

Claim 22 depends from claim 21 and is patentable over the Reichow et al. and Hall patents at least for the reasons given above in connection with claim 21, and for the further dependent limitations recited therein. Accordingly, applicants submit that claim 22 is in condition for allowance.

The Examiner rejected claims 5, 6, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Reichow et al. in view of Hall as applied to claim 1 above, and further in view of U.S. Patent No. 3,880,394 to Wisecarver and U.S. Patent No. 3,705,438 to Stosberg et al.

Claims 5 and 6 depend from properly allowable claim 1 and are patentable over the cited references at least for the reasons given above in connection with claim 1 and for the further dependent limitations recited therein. Likewise, claims 23 and 24 depend from properly allowable claim 21 and are patentable over the cited references at least for the reasons given above in connection with claim 21 and for the further dependent limitations recited therein.

For an Examiner to properly rely on a reference under 35 U.S.C. § 103, the reference must be analogous prior art. See M.P.E.P. Section 2141.01(a). "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In re Oediker, 977 F.2d 1443, 1446 (Fed. Cir. 1992).

"A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992). "Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference...." Id.

The purpose of the Wisecarver reference, entitled "Extensible Load Bracing Device," is to provide a bracing device that can be accommodated in restricted and limited space by reason of a particular arrangement of specific nut design with a captive wrench. The brace provides a square tube 1 having a sleeve 6 of cylindrical interior welded therein.

Applicants, on the other hand, have addressed the problem of utilizing a caster mounting tube having a planar external side wall mounted to the frame of a patient support apparatus and being configured to receive the sleeve of a caster device. Clearly, it cannot reasonably be asserted that the purpose of providing a mounting tube for the receipt of a caster sleeve on a patient support apparatus is the same as the purpose of providing a bracing device for use in restricted and limited space. Since Wisecarver does not even remotely relate to the same problem as the present invention, applicants would not have been motivated to consider Wisecarver in making their invention. These disciplines are entirely unrelated. Accordingly, applicants respectfully request withdrawal of the rejections based on Wisecarver.

Additionally, even if Wisecarver constituted analogous art, which it does not, applicants respectfully submit that claims 5, 6, 23 and 24 are allowable thereover. None of the cited references, alone or in combination, overcome the deficiencies of Reichow et al. and Hall as identified above with respect to independent claims 1 and 21.

In an attempt to support his position, the Examiner takes "Official Notice that it is old and well known of using a square tubing with a thick wall by cutting a cylindrical cross section through the square interior wall to receiving (sic) a cylindrical sleeve of a caster, is a matter of design choice that have the same intended function of sliding freely and large bearing areas between the mounting tube and the sleeve, depending upon cost and availability of materials during manufacturing."⁶

This conclusory statement by the Examiner does not satisfy the Patent and Trademark Office burden as clearly defined by the Federal Circuit. In its simplest form, the Examiner is essentially stating that the invention is obvious because he has taken notice of such. This simply does not satisfy the Patent and Trademark Office burden of establishing obviousness and circumvents the requirements of 35 U.S.C. § 103.

For these additional reasons, it is respectfully submitted that claims 5, 6, 23, and 24 are in condition for allowance.

⁶ Office Action, numbered paragraph 7, at page 7.

The Examiner rejected independent claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Reichow et al. in view of Hall and Stosberg et al. It is noted that originally solicited dependent claim 7 was found to contain allowed subject matter in the Office Action mailed January 30, 2002. In response, claim 7 was rewritten in independent form. It is respectfully submitted that claim 7 remains in condition for allowance.

The Reichow et al., Hall, and Stosberg et al. patents, each alone or in combination, fail to disclose, teach or suggest the patient support apparatus recited in amended claim 7 comprising "... a plurality of caster mounting tubes, each mounting tube having ... a plurality of external side walls including a generally planar first external side wall abutting the base frame, the mounting tube being connected to the base frame by welds located adjacent the first external side wall, and a plurality of set screws configured to orient the plurality of casters and wherein the caster mounting tubes are each formed to include an opening configured to receive one of the set screws."

The Stosberg et al. patent simply discloses a conventional castor including a cylindrical casing 16. The castor is inserted in a tubular foot 24 of a bed frame and secured therein by means of a screw 25.

While Hall at Col. 4, lines 55-57 suggests the attachment of an exterior support member 44 to vertical face 38 of a frame 24, such as by "welding, rivets, or spot welding", this clearly does not suggest a set screw received within an opening formed within the caster mounting tube alone, or in combination with welds adjacent the first external side wall as recited in claim 7. Stosberg et al. fails to overcome this deficiency, since there is no hint or suggestion in this reference of providing the set screw in combination with welds adjacent the generally planar first external side wall.

As detailed above, the Examiner's conclusory statement that "it is old and well-known to use rivets and welding together" does not satisfy the Patent and Trademark Office burden as clearly defined by the Federal Circuit. The Examiner has simply failed to provide any teaching or suggestion which would motivate one of ordinary skill in the art to arrive at the invention recited in amended claim 7.

As such, for at least the reasons provided above, applicants respectfully submit that independent claim 7 is in condition for allowance.

Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichow et al. in view of Hall as applied to claim 1 above, and further in view Stosberg et al.

Claim 9 depends from independent claim 1 which is believed to be in condition for allowance for the reasons provided above. As such claim 9 is likewise believed to be patentable over the applied art at least for the limitations of the respective independent claim from which it depends, and for the further dependent limitations recited therein.

The Examiner rejected independent claim 12 under 35 U.S.C. § 103(a) as being unpatentable over Hall in view of Wisecarver and in view of Stosberg et al. It is noted that claim 12 was found to contain allowable subject matter in both the Office Action mailed January 30, 2002 and in the Office Action mailed May 29, 2003. In response, claim 12 was rewritten into independent form.

The Examiner has now cited two new references in rejecting claim 12. As detailed above, Wisecarver is non-analogous art and, as such, is not properly considered in rejecting claim 12. More particularly, there is simply no cited prior art reference which would motivate one of ordinary skill in the art to modify Hall by forming an interior opening through a mounting tube having a generally round cross-sectional shape to receive the cylindrical sleeve of a caster therein.

Again, the Examiner has taken "Official Notice that it is old and well known of using a square tubing with a thick wall by cutting a cylindrical cross-section through the square interior wall to receiving (sic) a cylindrical sleeve of a caster...."⁷ As detailed above, this official notice does not satisfy the Patent and Trademark Office burden of establishing obviousness and circumvents the requirements of 35 U.S.C. § 103.

For at least the foregoing reasons, there is simply no teaching or suggestion in the prior art of providing the elements as now clearly recited in independent claim 12. Claim 12 is therefore believed to be in condition for allowance.

Applicants note with appreciation the Examiner's allowance of claims 11 and 13-15.

D. Final Remarks

Claims 1-15 and 21-24 are believed to be in condition for allowance. Such allowance is respectfully requested.

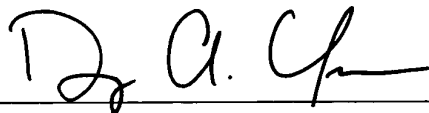
If necessary, please consider this a Petition for Extension of Time to effect a timely response. Please charge any additional fees or credits to the account of Bose McKinney & Evans, LLP Deposit Account No. 02-3223.

⁷ Office Action, numbered paragraph 10, at page 10.

In the event that there are any questions related to this response or to the application in general, the undersigned would appreciate the opportunity to address those questions directly in a telephone interview to expedite the prosecution of this application for all concerned.

Respectfully submitted,

BOSE McKINNEY & EVANS, LLP

A handwritten signature in black ink, appearing to read "D. A. Yerkeson", is written over a horizontal line.

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